LOWER WILLAMETTE GROUP

December 12, 2007

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William K. Barquin
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Re: Lower Willamette River, Portland Harbor Superfund Site
USEPA Docket No: CERCLA-10-2001-0240
Lamprey Ammocoete Sediment Bioassay Recommendation, Portland Harbor Natural Resource Trustee Council Fish Committee, November 9, 2007

Dear Chip, Eric and Billy:

Thank you for transmitting to the Lower Willamette Group (LWG) the above-captioned Trustee Council Proposal. We have reviewed it thoroughly and discussed its contents with representatives of the Trustee Council and the U.S. Environmental Protection Agency (EPA). We also convened a technical ecological risk group composed of consultants working with the LWG and its members to consider the scientific efficacy of the proposal and how it might fit within the current RI/FS process.

The LWG recognizes the importance of the lamprey to the Trustees and in the Willamette and Columbia River watersheds generally. As you know, we worked with EPA and the Trustees in 2006 and 2007 to develop and undertake two studies specifically focused on this species, the Round 3 Sampling for Lamprey (*Lampetra* sp.) Ammocoete Tissue and the Round 3 Lamprey Ammocoete Toxicity Testing. The latter went through two phases, and data collection in the second phase is still underway.

In carefully considering the proposed study, we considered the following:

- A two phase major study of the toxicity of chemicals in Portland Harbor to the lamprey ammocoetes is currently being completed by the LWG under a work plan that was subject to significant review and modifications by EPA and its partners, from the time it was originally proposed in August 2006 until the Phase Two work was finalized in a September 12, 2007 Work Plan and QAPP that incorporated changes requested by EPA and its partners.

- Tissue sampling of lamprey ammocoetes in the Portland Harbor was conducted by the LWG in September and October 2006, under an approved work plan and in cooperation with EPA and its partners.

- Between these two efforts, the LWG has already taken in excess of 3,000 lamprey ammocoetes from Oregon waters.

- The Trustee Council Proposal would have the LWG undertake to perform toxicity studies for which no scientifically established toxicological protocols exist, which could take years. Even if successful, any data obtained from those studies would not be available in time for incorporation into the risk assessments for the Portland Harbor RI/FS.

- The toxicity testing recommended in Trustee Council Proposal, even if successfully conducted, would fail to address a specific issue raised in that proposal—uncertainty about lamprey sensitivity to toxicants during the metamorphosis from the ammocoete to macrophthalmia life stage.

The LWG continues to believe that the two agreed-upon studies will provide the information necessary for purposes of the risk assessment that will be part of the RI/FS. However, the LWG also recognizes the importance of this species to the Trustees. In respect for the Trustee Council's concerns, we asked the LWG ecological risk experts what further could be done to reduce uncertainties regarding risk to lamprey ammocoetes in the Portland Harbor. Based on that input, we will commit to undertaking three additional efforts to assist in the interpretation of data being obtained from the two approved studies that are already underway. Specifically, the LWG will undertake to:

- Conduct a literature review for evidence of differences in the mechanism of toxicity from water versus dietary exposure of fish to organic chemicals.

- Review the USEPA ACE (acute-to-chronic extrapolation) database and/or the scientific literature to evaluate the variability of acute:chronic ratios across species as a way to better describe the level of uncertainty in the assumption that the chronic sensitivity of lamprey ammocoetes to toxicants, relative to other species, would be the same as their relative acute sensitivities.

- In the on-going Round 3 Lamprey Ammocoete Toxicity Testing, include a comparison of observed lamprey toxicity values to literature-based invertebrate toxicity values, in addition to the comparison to toxicity values for other fish species that the LWG has already committed to undertake.

In the absence of scientifically established toxicological protocols for testing Pacific Lamprey ammocoetes as recommended in the Trustee Council Proposal or a linkage to clearly established

data needs associated with the RI/FS, the LWG considers such testing as separate from the critical path of the record of decision. However, we suggest that there may be other forums in which further lamprey research may be discussed and pursued. Such forums may include the City of Portland's River Renaissance program, cooperative natural resource damage assessment discussions, or regulatory agency and cooperative university programs. Members of the LWG may be able to facilitate the development of discussion in alternative forums with the Trustee Council. We invite the trustees to let us know if we might be of assistance.

Thank you.

Sincerely,

Jim McKenna, LWG Co-Chair

Bob Wyatt, LWG Co-Chair

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